

Title (en)

A CASCADE OF FILTERS AND A METHOD FOR FILTERING AN ANALOG RADIO-FREQUENCY INPUT SIGNAL

Title (de)

FILTERKASKADE UND VERFAHREN ZUR FILTERUNG EINES ANALOGEN FUNKFREQUENZEINGANGSSIGNALS

Title (fr)

CASCADE DE FILTRES ET PROCÉDÉ DE FILTRAGE D'UN SIGNAL D'ENTRÉE ANALOGIQUE À RADIOFRÉQUENCE

Publication

**EP 3414845 A1 20181219 (EN)**

Application

**EP 17704830 A 20170208**

Priority

- EP 16154676 A 20160208
- IB 2017050664 W 20170208

Abstract (en)

[origin: EP3203640A1] A filter (400) according to an embodiment includes a splitter (410) configured to split an analog radio-frequency input signal (IS) into at least a first signal (S1) and a second signal, a first signal path (420) configured to generate, based on the first signal (S1), a time-delayed signal (TDS) delayed by a predetermined delay time in the time domain, a second signal path (430) configured to generate, based on the second signal (S2), a phase-shifted signal (PSS) shifted by a controllable predetermined phase shift in the phase domain, and a coupler (440) configured to generate an output signal (OS) based on the time-delayed signal (TDS) and the phase-shifted signal (PSS). Using an embodiment may improve a trade-off between frequency-related flexibility and frequency agility of a receiver infrastructure.

IPC 8 full level

**H04B 1/525** (2015.01)

CPC (source: EP US)

**H04B 1/0475** (2013.01 - US); **H04B 1/1018** (2013.01 - US); **H04B 1/525** (2013.01 - EP US); **H04B 7/0894** (2013.01 - US)

Citation (search report)

See references of WO 2017137891A1

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**EP 3203640 A1 20170809**; EP 3414845 A1 20181219; EP 3414845 B1 20210303; US 11469791 B2 20221011; US 2021083716 A1 20210318; WO 2017137891 A1 20170817

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